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(54) Title: BANKNOTE VALIDATOR

(57) Abstract

A banknote validator includes magnetic and optical sensors (305, 306, 307) and a non–return gate in its banknote path (80). The magnetic sensor (307) comprises a magnetic circuit and an electronic circuit. The magnetic circuit comprises a yoke (402) and two giant magneto–resistors (400, 401) and the electronic circuit comprises a coil (407) arranged to generate a magnetic field in the yoke (402) and first and second feedback control loops. The first loop is responsive to the output of the first giant magneto–resistor (400) to energise the coil (407) so that the giant magneto–resistor operates in a predetermined region of its characteristic. The second loop is responsive to the differential between the giant–magneto–resistor outputs to generate a bias voltage for the second giant–magneto–resistor (401) tending to cause the differential to be zero.